

NOTES:

1. PRECAST MANHOLE COMPONENTS SHALL CONFORM TO ASTM C-478.
2. PIPE JOINT CONNECTIONS WILL NOT BE ALLOWED INSIDE THE MANHOLE OR WITHIN 5 FEET OF THE CONCRETE COLLARS FOR ALL NON-HDPE PIPE INSTALLATIONS.
3. MANHOLE BASE SHALL BE PORTLAND CEMENT CONCRETE (P.C.C.) AND SHALL HAVE THE FOLLOWING CHARACTERISTICS: 3000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS, MINIMUM 6 SACKS OF CEMENT PER CUBIC YARD WITH SLUMP AT 1 TO 4 INCHES. ALL MATERIAL SHALL CONFORM TO SSPWC, SECTION 202.
4. MANHOLE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 204 "MANHOLES AND CATCH BASINS" OF THE STANDARD SPECIFICATIONS.
5. PRECAST MANHOLE SECTIONS, OTHER THAN GRADE RINGS, SHALL BE JOINED WITH FLEXIBLE PLASTIC GASKET MATERIAL SUCH AS "RAM-NEK" OR EQUAL AS PER MANUFACTURER'S RECOMMENDATIONS.
6. EXCAVATION AND BACKFILL SHALL BE AS SPECIFIED FOR "TRENCH EXCAVATION AND BACKFILL" IN SECTION 305 OF THE STANDARD SPECIFICATIONS.
7. EXCAVATION SHALL BE AS NEARLY VERTICAL AS POSSIBLE (SHEET AND SHORE IF SOIL CONDITIONS REQUIRE), IN EXISTING STREET SECTIONS, ALLEY SECTIONS AND CONFINED AREAS, SUCH AS LIMITED EASEMENTS OR ADJACENT STRUCTURES. NATURAL ANGLE OF REPOSE WILL BE ALLOWED IN ALL OTHER AREAS.
8. PRECAST CONCRETE BASE MAY BE USED IN LIEU OF CAST-IN-PLACE BASE.
9. REFER TO STANDARD DETAIL DRAWING NO. R-222 (311) FOR PIPE CONNECTION REQUIREMENTS.
10. ALL MANHOLES SHALL BE WATERTIGHT.
11. PRIOR TO BACKFILLING, ALL MANHOLES SHALL BE VACUUM TESTED PER THE REQUIREMENTS OF ASTM C-1244.
12. NO STEPS, LADDERS OR OTHER CLIMBING DEVICES SHALL BE INSTALLED IN THE MANHOLE.

NO.	REVISION	DATE	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	SECTION	RENO
1	ADD NOTE 12	01/04	NOTES—FORCE MAIN PASS—THROUGH MANHOLE	DRAWING NO.	R-212B (306,311)
				DATE	08/00
				PAGE	217
APPROVED BY		G.S.			
		01/04			